MICHALEK, Karal COUNTRY : Czechoslovakia CATEGORY ass. Jour. : azzhia., :o. 16 1959, 30. 58949 : The Proceeding of Egg Shells TIML ORIG. PUB. : Prumyal Fotravia. 5, No 1, 51-52 (1958) 1986. W . : the earthor againstos retires used in the armosasing of expendits: (a) aroung of the enels with the arbumin contained in them, (b) drying of the shells after preliminary separation of the albumin, and (c) a new method giving a maximum yield of albumin and consisting in the removal of airt from the shells, separation of the film (sic), and sterilization of the products obtained. Z. FADINGELY CARD: 1/1

Country : CZECHOŚLOVAKIA Category= : Diseases of Farm Animals. R Disease Caused by Bacteria and Fungi.

Abs. Jour.: Ref Zhur-Biol., No 21, 1958, 97005 Author Svec, R.; Michalek, Karul Institut. : Data on the Prophylaxis of Cholera in Fowl. Titlo Orig. Pub.: Veterin. casop., 1957, 6, No 6, 465-439 : The successful results of experiments in which Abstract fowl cholera was eradicated by a single admini-stration of sulfamide preparations or of a spe-cific serum with a simultaneous exclusion of animal protein from the rations of the fowl which were given fodder stewed to a pulp, are reported Olie 1/1 Card:

CZECHOJI. VAXIA

VOSOLSOBE, J. HICHALEK, J

Department of Inorganic Technology, Institute of Chemical Technology, Prague - (for both)

Prague, Collection of Gaechoslovek Charles Communisetions, No 7, July 1966, pp 2646-2663

"Differential reactor with gas recirculation."

### L 31780-66

ACC NR: AP6021653

ORG: none

SOURCE CODE: CZ/0039/65/026/007/0402/0406

AUTHOR: Michalek, Jan (Engineer)

The interior of the second

TITLE: Temperature compensation of Hall generators by means of thermistors

SCURCE: Slaboproudy obzor, v. 26, no. 7, 1965, 402-406

TOPIC TAGS: Hall generator, temperature dependence, thermistor, Hall constant

The temperature dependence of Hall's constant ABSTRACT: (R,) in Hall generators causes variations of their sensitivity with temperature. The dependence of RH = f(T) is determined in the article for Hall generators of InAs, InSb and Ge and a temperature compensation is suggested, using thermistors. The article is supplemented by a computation of the compensating network and its experimental checking. Orig. art. has: 8 figures, 12 formulas and 1 table. Based on author's Eng. abst. JPRSJ

SUB CODE: 09, 20 / SUBM DATE: 260ct64 / ORIG REF: 002 / SOV REF: 001

LS

### MICHALEK, Jozef

Rupture of the kidney in a female cancer patient. Polski przegl. chir 33 no.1:79-81 161.

1. Z III Kliniki Chirurgicznej Sl. A.M. w Bytomiu Kierownik: prof. dr M. Trawinski.

(KIDNEYS neepl)

### MICHALEK, Jozef

Gastritis hypertrophicz glandularis. Polski przegl. chir. 31 no.4: 433-437 Apr 59.

1. Z III Kliniki Chirurgicznej Slaskiej Akademii Medycznej w Bytomiu Kierownik: prof. dr M. Trawinski (GASTRITIS, surg.) MICHALEK, J.

Crohn's disease (ileitis segmentalis). Polski przegl. chir.
29 no.1:25-28 Jan 57.

1. Z III Kliniki Chirurgicznej Slaskiej A.M. w Bytomiu
Kierownik: prof. dr. M. Trawinski. Bytom, ul. Wyczolkowskiego
4, m. 7. = Adres autora.

(ILEITIS REGIONAL

(Pol))

MICHALEK, Josef. Obv., lekar, Litovel.

Phytotherapy of gastrointestinal diseases. Prakt. lek. 34 no.8: 170-174 Ap \*54.

(GASTROINTESTINAL DISEASES, therapy, \*phytother.)

# MICHALEK, Josef

Wounds of the buttock complicated by multiple extraperitoneal perforation of the urinary bladder. Polski przegl. chir. 28 no. 12:1277-1279 Dec 56.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001033800030-6 MICHALEK, Josef, MUDr Obv. lekar, Litovel. Phytotherapy of diseases of the gastrointestinal system. Prakt. lek. 34 no.9:205-208 My '54. (GASTROINTESTINAL DISMASES, therapy, \*phytother.) (PLANTS, \*phytother. of gastrointestinal dis.)

L 31199-66 EWP(j) RM

ACC NR. AP6022556

SOURCE CODE: CZ/0008/66/000/001/0087/0089

AUTHOR: Vosolsobe, Jan; Michalek, Jiri

ORG: Department of Inorganic Technology, College of Chemical Technology, Prague

(Katedra anorganicke technologie, Vysoka skola chemicko-technologicka)

TITLE: Differential reactor with gas recirculation

SOURCE: Chemicke listy, no. 1, 1966, 87-89

TOPIC TAGS: heterogeneous catalysis, exhaust gas recirculation, chemical reactor,

sulfur compound

ABSTRACT: Differential reactors with gas recirculation are suitable for the study of heterogeneous catalytic reactions. The reactors should use very little of the reaction gas, be not influenced by outside diffusion, and offer an easy arrangement for the calculation of reaction velocities. The authors designed such a reactor suitable for studying reactions of sulfur dioxide. It is constructed in aluminum and may be used at temperatures up to 520°C. The recirculating pump used for the gas is described. Detailed description of the reactor, and of its heating system is given.

J. Muller, F. Huml, and J. Tichy participated in the development of the reactor through graduate work in the field of inorganic technology. The authors congratulate them for its successful completion. They also thank Misters J. Otto, L. Eichelmann, and M. Urban, who took part in the development and construction of the reactor. Orig. art. has: 1 figure and 1 formula. [JPRS]

SUB CODE: 07 / SUBM DATE: 12Feb65 / ORIG REF: 001 / SOV REF: 001

Card 1/1 BLG

0915

0565

44

CIA-RDP86-00513R001033800030-6

HYSAVY, Bohumil; MICHALEK, Jaromir; FIDLER, Vladimir.

para Company and C Possibility of adaptation of Amidostomum anseris (Zeder, 1800) Railiet and Henry, 1909, in other birds. Cesk.biol 4 no.7: 393-396 J1 155.

1. Biologicky ustav CSAV, parasitologie, Praha a Drubezarske zavody, Libus. (PARASITES,

Amidostomum anseris, adaptation in birds other than geese) (FOWLS, DOMESTIC,

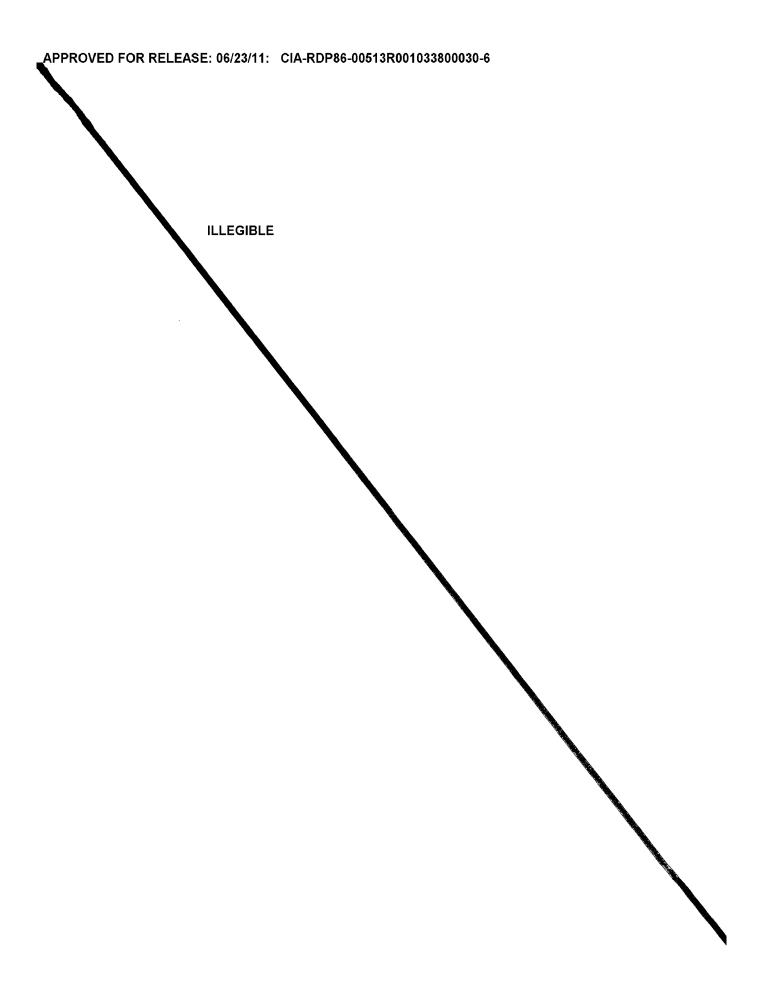
adaptation of Amidostomum anseris in birds other than geese)

MICHALEK, J. Surge test of magnetic-core sheet insulation. El tech cas 14 no.4:246-247 163. 1

### MICHALEK, J.

The Chirana N 5 anesthesia apparatus. Jemma mech opt 5 no.3: 91 Mr 160.

1. Chirana, Praha.



MICHALEK, J.

Expansability of enamel insulation of wire as an indicator of properties of resol-polyamide lacquers. p. 220.

ELEKTROTECHNICKY CASOPIS, Bratislava, Czechoslovakia, Vol. 10, No. 4, 1959

Monthly List of East European Accessions, (SEAI) LC, VOL. 8, No. 10, Oct. 1959.
Uncl.

MICHALEK, H.

Parahydroxyphenylpyruvic acid oxidase in fishes and birds. Bul Ac Pol biol 9 no.3:105-107 61. (EEAI 10:9/10)

1. Department of Physiological Chemistry, School of Medicine, Warsaw. Presented by J. Heller.

(FISHES) (BIRDS) (OXIDASES) (HYDROXYPHENYLPYRUVIC ACID)

SZARKOWSKA, L.; MICHALEK, H.

Ubiquinone in insects. Bul Ac Pol biol 8 no.10:429-432 160. (EEAI 10:9)

1. Institute of Biochemistry and Biophysics, Polish Academy of Sciences and Department of Physiological Chemistry, School of Medicine; Warsaw. Presented by J. Heller.

(Ubiquinones) (Insects)

MICHALEK, Hanna; SZARKOWSKA, Indmila

The quinome-amino acid complexes and polyphenolase. Acta biochim.polon. 6 no.4:399-409 159.

1. Zaklad Chemii Fizjoloaicznej AM, Instytut Biochemii i Biofizyki PAN, Warszawa Kierownik: Prof. dr Jozef Heller.

(QUINONES chem)

(AMINO ACIDS chem)

(OXIDASES chem)

- 1. Byrkit, G.D., Michalek, G.A.
- 2. USSR (600)
- 4. Hydrazine
- 7. Hydrazine in organic chemistry (from "Ind. Eng. Chem." 42, 1950. Usp. khim. 21 no.12, 1952.

9. Monthly ist of Russian Accessions, library of Congress, March 1953, Unclassified.

MICHALEK, F.

GEOGRAPHY & GEOLOGY

Periodicals: KRASY SLOVENSKA. Vol. 34, No. 1. 1957.

MICHAIEK, F. Memories of old iron-ore mining in Grava. p. 29.

Monthly List of East European Accessions (EEVI) LC Vol. 8, No. 4, April 1959. Unclass.

MICHALEK, E. Mine surveying in the widening and deepening of an upcast shaft. P. 210. (UHII) (Fraha, Czechoslovakia) Vol. 7, no. 6, June 1957 SO: Monthly Index of East European Accession (MEAI) IC Vol. 7, No. 5, 1978 MICHALEK, Boguslaw, inz. Measurements of the corona losses and determination of their yearly average in extremely-high voltage networks. Energetyka Pol 18 no. 2: 50-53 F '64.

MICHALEK, B., inz.

Complex mechanization of coal mining. Tech praca 16 no.3:179-181 Mr '64.

1. Lignitove doly, Hodonin.

MICHALEK, Boguslaw, ing.

13th General meeting of Delegates of the Polish Electrical Engineers
Association in Hirschberg. Energetyka Pol 14 no.7:222-224 Jl '60.

(Poland-Electrical engineering)

MICHALEK, B.

TECHNOLOGY

Periodicals: ENERGETY KA. Vol. 12, nd. 10, Oct. 1958

MICHALEK, B. Three-phase electrometers for integrating the square of the current intensity. p. 302.

Monthly List of East European Accessions (FEAI) LC, Vol. 7, No. 2, February 1959, Unclass.

MIKHALETS, Schenek [Michalec, Z.](Praga) Airplanes made in Czechoslovkia. IUn.tekh. 5 no.3:68-70 Mr '61. (MIRA 14:6) (Czechoslovakia--Airplane industry)

MIKHALETS, Zimak [Michalec, Zdenek], inzh. (Praga)

Underground laboratory. 1Un.tekh. 3 no.12:49-50 D 58. (MIRA 12:1)

(Czechoslovakia--Gravitation--Research)

APPROVED FOR RELEASE 06/23/11 CIA-RDP86-00513R001033800030-6

NICHALEC, Z.
MIKHALBT9, Zdenek (Fraga).

Prague seen by a technician. IUn. tekh. 2 no.2:54-55 F '58.

(Prague—Technology)

(MIRA 11:2)

MICHALEC, Z.

MINIALETS, Edensk, inshener (g. Praga).

Underground hydro-electric plant. IUn.tekh. no.7:27-29 Je '57.

(MIRA 10:7)

(Lipno (Czchoslovakia)--Hydroelectric power stations)

MICHALEC T. COUNTRY : POLAND CATEGORY : Clemical Technology. Chemical Products and Their Applications, Leather, Fur. Gelatine\* ABS. JOUR. : RAMIM., NO. 23 195), NO. 84521 Lasek, W.; Michalec, T.; Kazubek, M. AUTHOR IMST. TITLE Chrome Leather With Refined Ton Side ORIG. PUB. : Przegl. skorzany, 1959, 14, No 2, 50-58; No 3, ABSTRACT : Effect of the finishing tanning employing vegetable and synthetic tanning agents on the physical and chemical properties of chrome leather was studied. In the filling up of leather, predestined for finishing and refining of too side, the best substances for the purvose are extracts of mimosa, neutralized chestnut, quebracho (sulfonated and non sulfonated) and oak; the use of 6% tannides. hasis the weight of leather, increases the \*Tanning Materials. Industrial Proteins. CARD: 1/2

PCI/HD/Chemical Technology. Chemical Products and Their Application. Leather. Fur. Gelatine. Tanning Materials. Industrial Proteins.

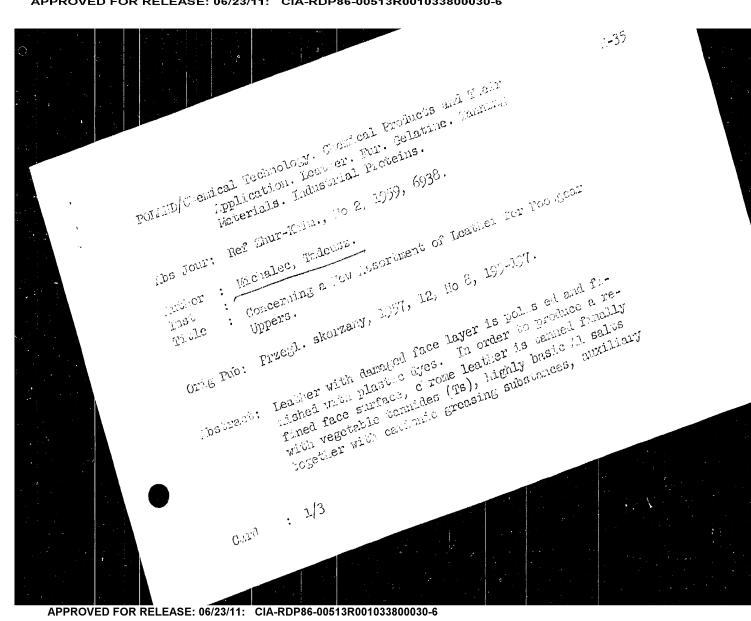
Abs Jour: Ref Zhur-Khim., No 2, 1959, 6938.

syntams of amphotoric character, and products of condensation of urea, melamines and decyandramides (retingan / transliteration from Russian / .....).

6, relyugan / transliteration from Russian / ....). It is recommended to carry out the greasing in two stages: first with amonic (sulfonated) fats and, after that, with cathonic fats, and to dye the leather before final tanning. The increased soaking capacity of leather connected with polishing is partly corrected by pressing or glossing the leather. Also, priming with cathonic oils (casein priming paint) is applied, after which leather is dyed with basic dyes. Leather, which has been finally tanned correctly and

X-35

Card : 2/3



POLAND/Chemical Technology. Chemical Products and Their ApplicationsLeather. Fur. Gelatin. Tanning Agents. Technical Proteins.

ar proteins.

Η

Abs Jour: Ref Zhur-Khim., No 13, 1958, 45458.

Author : Michałec Tadeusz Inst

Title : Synthetic Polymer Based Leather Stains.

Orig Pub: Przegl. skorzany, 1956, 11, No 9, 224-228.

Abstract: The casein and nitrocellulose based stains used at the present time in finishing of leather can be advantageously replaced by stain emulsions based on synthetic resins. This will make it possible to decrease the amount of labor involved in polishing the grain side of leather and to utilize chrome pigskin with artificial grain. A brief description is pro-

Card : 1/2

MICHALTO, T. CO.

Coating paints containing synthetic resins.

P. 224. (Przeglad Skorany. Vol. 11, no. 9; Sept. 1956, Lodz, Poland)

Monthly Index of East European Accessions (EFAI) LC. Vol.7,no. 2, February 1958

MICHALEC, T.

MICHALEC, T. Finishing dyes for leather. p. 172.

Vol. 11, no. 7, July 1956 FRZEGLAD SKORZANY PHILOSOPHY & RELIGION Warszawa, Poland

SO: East European Accession, Vol. 6, No. 3, March 1957

L 30078-66

ACC NR: AP6020601

ferromagnetic material, or by measuring the quanta polarization occurring during the transmission or scattering in a magnetized ferromagnetic material. This method can eliminate the use of theoretically calculated corrections that must be introduced in the measured value of the circular polarization of gamma quanta. The article is an abstract of UJV report No 1289/65. [Orig. art. in Eng.] [JPRS]

SUB CODE: 20, 14 / SUBM DATE: none

SOUNCE CODE: CZ/0038/65/000/010/0331/0382 EWI (m) Institute of Nuclear Research, CSAV, Rez (Ustav Jaderneho Vyzkumu CSAV) 30078-66 TITIE: Experimental determination of the efficiency of an analyzer for the circular AUTHOR: Michalec, Rudolf ORG: TOPIC TAGS: circular polarization, gamma quantum, ferromagnetic material, Compton polarization of gamma quanata SOURCE: Jaderna energie, no. 10, 1965, 381-382 TOTAL TRUD: CIrcular Polarization, gamma quantum, ierromagnetic material, compton equipment, nuclear physics apparatus effect, gamma scattering, physics laboratory equipment, nuclear physics apparatus Methods for the direct experimental determination of ABSTRACT: Reunous for one direct experimental described on the the analyzer's efficiency are described; and analyzer's efficiency are described. Compton scattering of polarized quanta by oriented electrons. efficiency may be measured by unpolarized quanta emitted from the investigated target. Transmission of unpolarized quanta through magnetized ferromagnetic materials is a function of the degree of magnetized terromagnetic materials is a tunetion of the degree of their magnetization. The nonpolarized quanta are partially polartheir magnetization. The nonpoterized quanta are partially poter ized circularly during transmission and scattering in magnetized material. The efficiency of both the transmission and the scattering analyzers can be determined by measuring the dependence of the ing analyzers can be determined by measuring the dependence of the transmission of nonpolarized quanta upon the magnetization of the Card 1/2

L 18291-63
ACCESSION NR: AP3003663

ASSOCIATION: Ustav jaderneho vyzkumu CSAV, Rez (Institute of Muclear Physics of the Czechoslovak Academy of Sciences).

SUBMITTED: 30Nov62 DATE ACQ: 16Jul63 ENCL: 00

SUB CODE: NS, PH NO REF SOV: 004 OTHER: 006

## L 18291-63 ACCESSION NR: AP3003663

reverse spin there is only refraction into the mirror (r.c. more than 1). This produces a neutron beam polarized in the direction of the field magnetizing the mirror. The degree of polarization was measured with another similar mirror, magnets with congruent fields being placed between them to maintain the direction of spin of the neutrons. The table shows that the method of double reflection gives comparatively low values differing from the true polarization because of depolarization of the beam in passing between the regions of the reverse magnetic fields. By using a third mirror the authors determined the quality of the other two and the relationship of their polarizations. Results: doublereflection method 0.788; shim method 0.857; combined 0.852. Using the better of the two mirrors as a polarizer, the degree of polarization attained in the reflected beam was 94 plus or minus 2%. The flow measured in the polarized beam was 2.10 sup 6 neutrons/sec (3. 10 sup 5 neutrons/ sq cm/sec.). The flow can be increased by using a mirror 1-1.5 m long. The beam obtained will soon be used to study the radiation capture of pllarized neutrons by nuclei. Orig. art. has 1 figure and 1 table.

Card 2/3

AFFTC/ASD Pad JD/HW EWT(1)/EWP(q)/EWT(m)/BDS z/0055/63/013/006/0474/0476 1, 18291-63 ACCESSION NR: AP3003663

AUTHOR: Kopecky, J., Chalupa, B., Michalec, R., Kajfosz, J.

TITLE: The beam of polarized neutrons obtained by the method of reflecting from a cobalt mirror

Chekhoslovatskiy fizicheskiy zhurnal, v. 13, no 6, 1963, 474-476

TOPIC TAGS: polarized neutron, magnetized cobalt mirror, reverse spin, depolarization, shim method

ABSTRACT: In the experimental magnetized mirror of cobalt on a copper base (both 50 microns thick), built by the 4 authors to obtain polarized neutrons, a beam of heat neutrons from the horizontal channel of their experimental reactor BBP-C. emitted by the collimator at the rate of (7.5 plus minus 0.2). 10 sup 7 neutrons/ sq cm/sec, with a maximum angle deviation of 12 minutes, falls on a cobalt surface 500 x 120 mm. As already shown by others, in case of sufficiently large B's there is complete reflection for neutrons with a spin parallel to the magnetizing field (refraction coefficient less than 1), whereas for neutrons with

Methods of polarization ...

Z/037/62/000/003/006/007 E024/E435

The author anticipates considerable improvements in the methods of polarization of neutrons and points out that more attention should be paid to experimental work in this field in Czechoslovakia. There are 9 figures.

ASSOCIATION: Ústav jaderného výzkumu ČSAV, Řež (Institute for Nuclear Research ČSAV, Řež)

SUBMITTED: July 7, 1961

Card 2/2

Z/037/62/000/003/006/007 E024/E435

AUTHOR:

Michalec, R.

TITLE:

Methods of polarization of cold, thermal and

resonance neutrons

PERIODICAL: Československý časopis pro fysiku, no.3, 1962, 272-291

TEXT: Review paper listing 62 references, 6 of which are Soviet, covering the period from 1937 to 1961. The paper is divided into the following sections and subsections:

1. Introduction (Definition of polarization. General theory

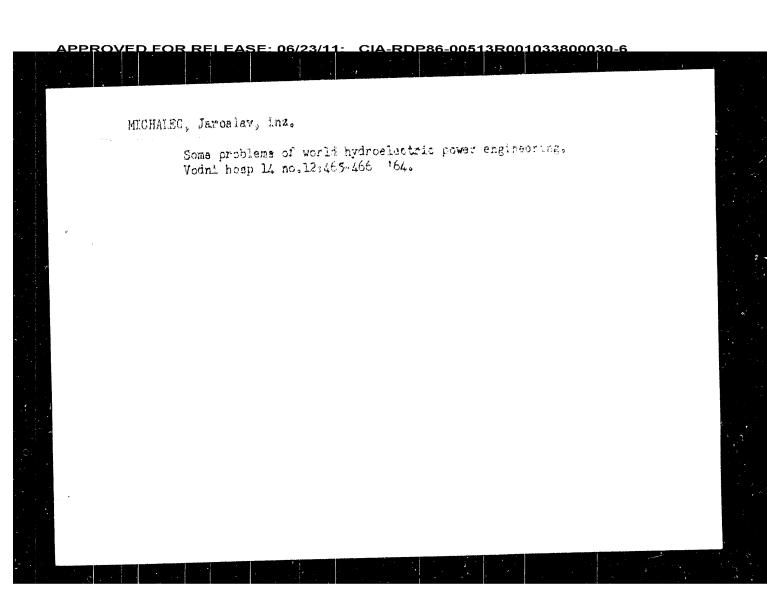
of polarization).

2. Methods of polarization (Transmission of neutrons through magnetized ferromagnetic samples. Complete reflection of neutrons from magnetized ferromagnetic mirrors. Diffractive reflection of neutrons from magnetized ferromagnetic single crystals. Reflection of neutrons from magnetic mirrors. Transmission of neutrons through polarized samples).

3. Comparison and applicability of the various methods of polarization for experimental work.

4. Conclusion.

Card 1/2



MICHALEC, Jaroslav, inz.

Outlook for construction of multipurpose hydro-electric power plants in Czechoslovakia. El tech obzor 50 nc.10:523-527 0 161.

(Water-power electric plants)

## MICHALEC, J.

MICHALEC, J. Notes on present conditions is the construction of sydroelectric plants from the point of view of new technology. p. 292.

Vol. 1, no. 10, Oct. 1956 NOVA TECHNIKA TECHNOLOGY Czechoslovakia

So. East European Accession, Vol. 6, No. 5, May 1957

MICHALEC, J.: KCSEK, K.

Problems concerning cooperation between steam and water-power electric stations in  $C_{2ec}$  csl vakia.

P. 74° Vel. 5, no. 6, 1955 2A SCCIALISTICKOU VEDU A TECHNKU Fraha, Czechoslovakia

Source: Monthly List of East European Accesions, (EEAL), LC, Vol. 5, no. 2 February 1956, Uncl.

MICHALEC, J. For better utilization of the Danner machine, p. 285, SKLAR A KERAMIK (Ministerstvo lehkeho prumyslu) Praha, Vol. 4, No. 11, Nov. 1954 SOURCE: East European Accessions List (EEAL) Library of Congress, Vol. 45, No. 12, December 1956

MICHALEC, J.

"The Role of Water Power in the Power Production of Czechoslovakia." p. 373,

(Za Socialistickou Vedu A Techniku, Vol. 3, no. 9, Sept. 1953, Praha)

SO: Monthly List of Resign Accessions, Library of Congress, March

CECELIN, Vladimir, promovany geolog; MICHALEC, Jaromir, inz., SUCHANEK, Vladimir, inz., kandidat technickych ved Increasing the depth range and accuracy of measurement by the Turam set. Geol pruskum 6 no.4:105-106 Ap '64. 1. Geologicky pruzkum National Enterprise, Prague and Czech Higher School of Technology, Prague.

ACCESSION NR: AP3008940

ASSOCIATION: Department of Vibration, IBTP Polish Academy of Sciences

SUBMITTED: 16Jul62

DATE ACQ: 240ct63

ENCL: 00

SUB CODE: 00

NO REF SOV: 002

OTHER:003

Card 2/2

ACCESSION NR: AP3008940

P/0033/63/015/003/0359/0369

AUTHOR: Kaliski, Sylwester; Michalec, Jerzy (Warsaw)

TITLE: Magnatoelastic resonance vibration of a perfectly conducting cylinder in a magnetic field

SOURCE: Archivum mechaniki stosowanej, v. 15, no. 3, 1963, 359-369

TOPIC TAGS: magneto-lastic resonance vibration, perfectly conducting elastic cylinder, magnetic field, Voight body, nonelastic body, elastic body, elastic cylinder

ABSTRACT: In considering the problem of magnetoelastic resonance vibration of a perfectly conducting elastic cylinder in an originally axial magnetic field, the authors examine the general case of a cylinder with mechanical internal damping. For the resonance amplitudes, they confine themselves to the influence of electromagnetic radiation into the vacuum adjacent to the cylinder, assuming the cylinder to be perfectly elastic. They obtain a set of equations and the boundary conditions for a nonelastic (Voight) body, as well as a general solution for a nonelastic and an elastic body. Finally, they determine the fundamental resonance frequency for a perfectly elastic cylinder and the resonance amplification of the amplitude of the cylinder (limited owing to the radiation of the electromagnetic energy into the vacuum).

MICHALEC, Jozef, inz.

National conference on the application of conclusions of science, research, and large-scale production technology in practice.

Vest ust zemedel 10 no.8:291-292 \*63.

1. Odbor pre podohospodarstvo, Slovenska narodna rada, Bratislava.

KALISKI, Sylvester; MICHALEC, Jerzy

The resonance amplification of a magnetoelastic wave radiated from a cylindrical cavity. Proceed vibr probl 4 no.1:7-15 163.

1. Department of Vibrations, Institute of Basic Technical Problems, Polish Academy of Sciences, Warsaw.

## S/144/60/000/012/005/005 E194/E255

Testing of Insulating Materials for Hermetically-Sealed Refrigerator Motors

which are of variable quality and absorb water freely. It is advisable to use wires with reinforced (duplex) insulation to avoid local damage of the enamelled layer. Of the wires enamelled with polyvinyl formalin lacquers, vinyflex was better than varnish S1917 and in laboratory tests the best of the enamelling lacquers was terephthalate lacquer terebek F35. Impregnation of motor windings greatly increases their life particularly if the wire enamel is not very stable to a mixture of freon and 12 oil. There are 4 figures, 4 tables and 8 references: 1 Soviet and 7 non-Soviet.

ASSOCIATION: The Bratislava Scientific Research Institute of

Cables and Insulating Material, Czechoslovakia

SUBMITTED: June 22, 1960

Card 9/9

## S/144/60/000/012/005/005 E194/E255

Testing of Insulating Materials for Hermetically-Sealed Refrigerator Motors

were periodically determined by change of resistance. results show that windings lacquered with vinyflex and impregnated with varnish S1701 gave the best life, the unimpregnated windings being of comparable quality. Enamelled wire Grade S1917 occupies second place and this one was much better with impregnation than without. Enamelled wire Grade PA-BA gave the shortest life. Mean temperatures during the tests ranged from 111 to 138°C. The tests only lasted months but had they been carried on longer to failure the classification of different grades might have been different. It was found that the reduction in insulation resistance and electric strength of the lubricating oil was due to breakdown of cellulose from the slot insulation and bindings of the end windings. One advantage of impregnation is that it improves the heat transfer. It is concluded that the reliability of sealedunit type refrigerator motors in service depends on the quality of the enamelled wire. Wires enamelled with polyvinyl formalin lacquers are better than those enamelled with polyamide lacquers, Card 8/9

## S/144/60/000/012/005/005 E194/E255

Testing of Insulating Materials for Hermetically-Sealed Refrigerator Motors

measured at a frequency of 1000 c/s. They were then exposed to a relative humidity of 75% and the dielectric loss angle was measured from time to time. The polyamide varnishes rezamid and PA-BA absorbed the most moisture and the polyvinyl formalin varnishes vinyflex and S1917 the least. The terephthalate varnish also showed appreciable water absorption. It is considered that water absorption increases with increase in the content of plastifiers, particularly in the case of polyamide varnishes. Life tests were made with the motors operating at higher than normal temperature. Tests were made with three grades of lacquer, each in ten motors, making 30 in all. The materials used were polyamide varnish PA-BA, polyvinyl formalin varnish S1917 and polyvinyl formalin varnish vinyflex. The motors were divided into two groups, one of which was impregnated with varnish S1701 and the other was not impregnated. The sets were tested and filled with freon-12 in the usual way. For life tests the motors were permanently connected to the supply and their winding temperatures Card 7/9

S/144/60/000/012/005/005 E194/E255

Testing of Insulating Materials for Hermetically-Sealed Refrigerator Motors

oil Grade F at temperatures of 110 and 120°C. The stability to a mixture of oil and freon-12 could be assessed from life tests on completed equipment. Ageing of the enamelled wire in the oil was assessed by determining the relative elongation of the enamel film in a twisting test. Specimens with polyamide and polyvinyl formalin varnishes aged at 110°C for about 20 days showed a gradual reduction of relative elongation. But after about twice this time the varnishes enamelled with polyamides became completely The polyvinyl formalin varnish is the most stable to lubricating oil and vinyflex is better than varnish S1917. most stable of all is terephthalate varnish Terebek F35. Rather similar results were obtained at 120°C, but significant results are obtained after two weeks of testing. No tests were made of the stability of varnish film to hot oil, but it is believed that hot oil accelerates enbrittlement. Water-resistance tests were also made on enamelled wires. The samples were first dried for 24 hours over silica gel and the dielectric loss angle was

Card 6/9

S/144/60/00C/012/005/005 E194/E255

Testing of Insulating Materials for Hermetically-Sealed Refrigerator Motors

additional hardening reduced the extract in two cases. action of solvents on the insulating materials was tested in a soxhlet apparatus at the normal boiling-point of the solvents. After extraction the dry residue was determined. Extractions were made with methanol, trichlorethylene and xylol. Samples of foil with impregnating varnish were extracted with normal benzene instead of xylol. The test results on enamelled wires showed that the polyamide varnishes manufactured in Czechoslovakia are more chemically stable than polyvinyl formalin varnishes. The best stability was shown by wires enamelled with terephthalate varnish, Terebek 435 (F35). Of the impregnating varnishes, both bakelite grades are approximately equivalent in chemical stability Although polyurethane varnish elmo-glass V-150 gave a small quantity of extract, the film was damaged by trichlorethylene and methanol. The film of varnish S1701 was also damaged by trichlorethylene. Tests were also made of the stability of enamelled wires to lubricating oil. The tests were made in pure lubricating

Card 5/9

## S/144/60/000/012/005/005 E194/E255

Testing of Insulating Materials for Hermetically-Sealed Refrigerator Motors

stable to freon-12. After about thirty minutes the varnish swells and loses its adhesion to metal. With this exception, all the materials were satisfactory. However, the low test temperature is a favourable factor, and assessment should not be based on this test alone. It is important to test the stability of the insulating materials to refrigerant at higher temperatures, which entails testing under pressure. The work was carried out by a method similar to that of Steinle but extracting at a temperature of 95°C for 4 hours. Attempts have been made to find solvents which would affect insulating materials in the same way as the usual refrigerants and it is found that methanol is comparable. Its use was proposed after a detailed study of variable factors such as hardening time, lacquer film temperature, exposure to methanol and others. Five grades of enamelling lacquer were used and in addition polyvinyl formalin lacquer 'Renvar'D' and terephthalate lacquers 'Terex' 17 and remanex PJ 768 (RL 768). The samples were tested in the condition of receipt and after additional hardening for three hours at a temperature of 135°C. Card 4/9

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Testing of Insulating Materials for Hermetically-Sealed Refrigerator Motors

used in the pure form but is one of the main components of impregnating varnish Grade C1911 (S1921). The polyurethane varnish elmo-glass V-150(manufactured by the firm of Dr. Beck in the German Federal Republic) is used to impregnate certain kinds of motors. A normal soxhlet extraction apparatus was used, cooled by alcohol at a temperature of -55°C. The specimens were made up of enamelled wire weighing about 200 g bearing about 4 g of The samples were wound up in a coil. Samples were also enamel. made up of copper foil with impregnating varnish also having a varnish weight of about 4 g. The samples were first dried for 16 hours at 105°C and then extracted for 6 hours 15 minutes in freon-12 which was evaporated to obtain the dry residues. The amounts of dry residue were measured. The results show that all the lacquers tested were stable to freon-12, according to Steinle's method of classification. Of the impregnating varnishes, the bakelite grades give a higher amount of extract than the elmo-glass polyurethane varnish but nevertheless this latter grade is not

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Testing of Insulating Materials for Hermetically-Sealed Refrigerator Motors

materials tested were used in motors which were life-tested. Freon-12 acts as an organic solvent of enamels. Material extracted by the freon may contaminate the refrigerator system. Various methods have been devised to test the stability of insulating materials to refrigerants; one developed by Dr. H. Steinle (Germany) involves cold extraction with freon-12, at a temperature of -29.8°C. A number of materials was tested by this method. Tests were made with enamelled wires of various kinds including: two grades with polyamide (TA-5A (PA-BA) and rezamid) lacquers, two grades with polyvinylformalin (Grade 61917 (S 1917) and vinyflex) lacquer and one grade with terephthalate (terebek \$35 (F35)) lacquer. The wires were made under normal conditions. A number of impregnating insulating varnishes was used namely. CiffOl (S1701), rezofen and elmo-glass 8-150 (V-150). Bakelite varnish S1701 is used in the manufacture of refrigerators although it is not electrically insulating. Rezofen is also a bakelite varnish but of different composition and hardening conditions. It is not Card 2/9

S/144/60/000/012/005/005 E194/E255

AUTHOR:

Michálek, Jan., Engineer

TITLE:

Testing of Insulating Materials for Hermetically-

Sealed Refrigerator Motors

PERIODICAL:

Izvestiya vysshikh uchebnykh zavedeniy, Elektromekh-

anika, 1960, No. 12, pp. 98-111

TEXT: Fully-sealed refrigerator units are coming into use for domestic refrigerators. This design has numerous advantages but makes more severe demands on the motor insulation, which is exposed to a mixture of refrigerant and lubricant. The object of the present work was to test available insulating materials for hermetically-sealed refrigerator motors operating in freon-12 and lubricating oil Grade (F). The equipment was dehydrated with methanol. The principal product studied was enamelled winding wire, attention also being paid to impregnating varnishes and slot insulation. Tests were made of the stability of the insulating materials to freon-12 and other chemical reagents and lubricating oil under laboratory conditions; the moisture resistance of enamelled wires was also tested. Some of the

Card 1/9

Block St. Charles Broken Cong.

MICHALEC, C., ED.

haboratory of the Hetabolish of Aloumin and Protein Santhesis of W (haborator pro setabolishes of Movin a proteo-syntems 18), Frague

Prague, Prakticky lekar, No 17, 1903, p 753

"The Casic Methotological moderneh of Ligola Catter that the Mew Biochestical Sechniques. The Experience with Their Application in the Prevention and Thinke Corost-ment of Aterroscleropis."

KRONDL, A.; VAVRINKOVA, H.; VOKAC, V.; MICHALEC, C.; HROMADKOVA, V.

Effect of chlortetracycline on lipid metabolism, 1. Digestion of fats. Cas. lek. cesk. 103 no.43:1188-1192 23 0 '64.

1. Ustav pro vyzkum vyzivy lidu v Praze, (reditel prof. dr. J. Masek, DrSc.) Laborator pro proteosyntezu fakulty vseobecneho lekarstvi Karlovy University v Praze, (vedouci prof. dr. J. Horejsi, DrSc.).

MICHALEC, C.; TICHY, J.

Determination of the spectrum in cholesterol esters in the cerebrospinal fluid by paper chromatography. Cas. lek. cesk. 103 no.27:756-757 26 Je 64

1. Laborator pro proteosyntezu fakulty vseobecneho lekarstvi
KU [Karlovy university] v Praze (vedouci: prof. dr. J.Horejsi,
ErSc.) a Neurologicka klinika fakulty vseobecneho lekarstvi
KU [Karlovy university] v Praze (prednosta: akademik K.Henner).

SULC, M. ; MICHALEC, C.

Level of lipid fractions and chromatography of unsaturated fatty acids in the blood of cocks during long-term cholesterol feeding under different ecological conditions. Sborn. lek. 66 no.6:167-170 Je!64

1. Angiologicka laborator fakulty vseobecneho lekarstvi University Karlovy v Praze (reditel: prof. dr. Z.Reinis, DrSc.) a Laborator pro metabolismus bilkovin a proteosyntezu fakulty vseobecneho lekarstvi University Karlovy v Praze (reditel: prof. dr. J. Horejsi, DrSc.)

KRONOL, A., VAVELUROVA, N.; MICHALEG, C., VORAG, V.

Effect of pancreatic lipase inhibition by chlortetrocycline on fat digestion and absorption. Rev. Grech. med. 10 co.4:273-282 '64.

1. Institute of Human Nutrition, Frague (Directors Prof. J. Masek, M.D. D.Sc.) and Laboratory of Froteosynthesis, Frague (Directors Prof. J. Horefsi, M.F., F.Sc.).

# MICHALEC, Gestmir

Chromatography on glass-fiber paper. Chem listy 56 no.12:1403-1419

l. Iaborator pro proteosynthesu a metabolismus bilkovin, Fakulta vseobecneho lekarstvi, Karlova universita, Praha.

KRONDL, A.; VAVRINKOVA, H.; MICHALEC, C.; VOKAC, V.; PLACER, Z.; SKALA, I.

Digestion and absorption of fats. Cesk. gastroent. vyz. 16 no.3/2:
191-196 Ap '62.

1. Ustav pro vyzkum lidu v Praze, reditel doc. MUDr. J. Masek, DrSc.
(BILE) (GLYCERIDES) (CHLORTETRACYCLINE)
(NEOMYCIN) (DIGESTION) (LIPID METABOLISM)

MICHALEC, C.; SULC, M.; MESTAN, J.; KOLMAN, Z.; JICHOVA, M.

Comparative chromatographic studies on the content of unsaturated triglycerides in various oils and fats. Cas.lek.cesk 100 no.29/30: 909-912 14 J1 61.

1. Laborator pro proteosyntezu a metabolismus bilkovin fakulty vseobecneho lekarstvi KU v Praze, reditel prof. dr. J. Horejsi, Laborator angiologicka fakulty vseobecneho lekarstvi KU v Praze, reditel prof. dr. B. Prusik.

(LIPIDS chem)

SULC, Miloslav; MICHALEC, Cestmir; MESTAN, Jan; KOLMAN, Zdenek

Experience with the isolation of unsaturated glycerides and their characteristics in the human serum. Cas.lek.cesk 100 no.22:696-698 2 Je \*61.

l. Angiologicka laborator fakulty vseobecneho lekarstvi KU v Praze, reditel prof. dr. B. Prusik. Laborator pro metabolismus bilkovin a proteosyntezu fakulty vseobecneho lekarstvi KU v Praze, reditel prof. dr. J. Horejsi.

(FATS, UNSATURATED blood)

MICHALEC, U.; SULC, M.; MESTAN, J.; HALAMA, D.; KOMAN, V.

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1. Laborator pro metabolismus bikovin a proteosyntezu fakulty vseebecneho lekarstvi University Karlovy v Praze, reditel prof. dr. J. Horejsi, Laborator angiologicka fakulty vseobecneho lekarstvi University Karlovy v Praze, reditel prof. dr. B. Prusik, Slovenska vysoka skola technicka, katedra biochemie a mikrobiologie v Bratislave, reditel prof. dr J. Nemec. (CHOLESTEROL blood)

SUIC, M.; MESTAN, J.; MICHALEC, C.

Lipids in certain pathological conditions. I. The iodine number in clinical atherosclerosis. Sborn.lek.63 no.2:33-39 F 161.

1. Laborator angiologicka fakulty vseobecneho lekarstvi University Karlovy v Praze, reditel prof.dr. B.Prusik; Laborator pro metabolismus bilkovin a proteosyntezu fakulty vseobecneho lekarstvi University Karlovy v Praze, reditel prof. dr. J.Horejsi, (ARTERIOSCLEROSIS blood)

(FATS blood)
(IODINE)

KRONDL, A.; VAVRINKOVA, H.; MICHALEC, C.; stat. zhodnocent: ZVOLANKOVA, K.

Role of the concentration of bile acids in the metabolism of fats.

3. Absorption of fats in man. Cesk. gastroent. vyz. 15 no.4:282-289

Je '61.

1. Ustav pro vyzkum vyzivy lidu v Praze, reditel doc. MUDr. Josef Masek.

(FATS metab) (BILE ACIDS AND SALTS metab)

KROHDL, A.; MICHALEC, C.; VAVRINKOVA, H.; VUKAC, V.; statisticke zhodnoceni ZVOLANKOVA, K.

Effect of the concentration of bile acids for metabolism of lipids. 1. The degree and emulsion of lipids in man. Cesk. gastroent. vyz. 15 no.1:31-38 F '61.

1. Ustav pro vyzkum vyzivy lidu v Praze, reditel doc. MUDr. Josef Masek Laborator pro proteosyntezu University Karlovy v Praze, prednosta prof. Jar. Horejsi.

(BILE ACIDS AND SALTS physiol.)
(LIPIDS metabolism)

STASTNY, M.; MICHALEC, C.; NOVAKOVA, E.

Contribution to the study on lipoproteins in the blood serum. Acta univ. carol. [med.] Suppl. 14:271-278 [61.

1. Laborator pro metabolismus bilkovin a proteosynthesu fakulty vseobecneho lekarstvi University Karlovy v Praze, prednosta prof. dr. J. Horejsi.

(LIPOPROTEINS blood)

KOLOUSEK, J.; DIENSTBIER, Zd.; MICHALEC, C.

Effect of methionine-sulfoximine on liver and spleen metabolism in the rat. Acta univ. carol. [med.] Suppl. 14:95-102 '61.

1. Biofysikalni ustav fakulty vseobecneho lekarstvi University karlovy v Praze, prednosta doc. dr. Zd. Dienstbier Laborator pro vyzkum proteinoveho metabolismu a proteosynthesy fakulty vseobecneho lekarstvi University Karlovy v Praze, prednosta prof. dr. J. Horejsi.

(LIVER pharmacol) (SPLEEN pharmacol)

(METHIONINE rel cpds)

SOUKUPOVA, Kveta; MICHALEC, Cestmir

Serum Tevel of higher fatty acids in young individuals; effect of fat ingestion. Sborn. lek. 61 no.1:6-9 Jan 59.

1. IV. interni klinika fakulty vseobecneho lekarstvi university Karlovy v Praze, prednosta prof. dr. Bohumil Prusik. Laborator pro proteosyntezu a metabolismus bilkovin, prednosta prof. dr. Jaroslav Horejsi. Dr. K.S. Kalininova 8, Praha 11.

(FATTY ACIDS, in blood

eff. of fat ingestion on higher fatty acids in young subjects (Cz))

(FATS, eff.

on blood higher fatty acids in young subjects (Cz))

CIA-RDP86-00513R001033800030-6

# Electrophoresis on Paper (Cont.)

CZECH/3451

use in medical and biochemical problems; 2) the physicochemical aspects and their relationship to the design of apparatus; 3) the analysis of separated materials; and 4) the future of electrophoretic technique in its application to clinical research and routine analysis. Each topic is followed by ref-

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#### PHASE I BOOK EXPLOITATION

CZECH/3451

Michalec, Čestmír, Doctor, Jaroslav Kořínek, Jan Musil, Doctor, and Jiří Růžička, Engineer

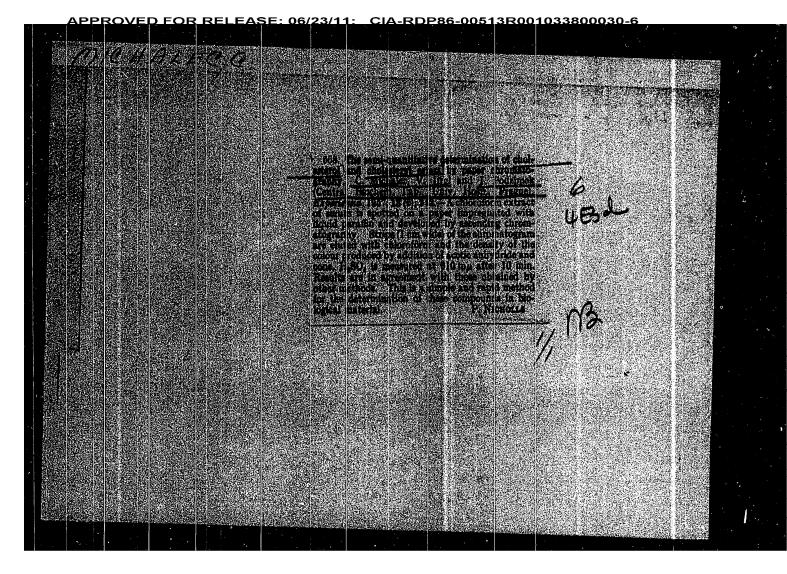
Elektroforesa na papíře a v jiných nosičích (Electrophoresis on Paper and Other Carriers) Praha, Nakladatelství Československé akademie věd, 1959. 313 p. (Series: Československá akademie věd. Sekce chemická. Studie a prameny, sv. 34) 2,250 copies printed.

Reviewer: Jiří Dvořák, Doctor; Scientific Ed.: Bořivoj Keil, Doctor, Engineer; Ed. of Series: Jarmila Klejnová.

PURPOSE: This book is intended for scientists and researchers engaged in the development and application of the electrophoretic method to the analysis of materials.

COVERAGE: This study of electrophoresis on paper and other carriers consists of three parts written by three different authors. The material includes: 1) the theory and general methods of paper electrophoresis with examples of its

Card 1/10

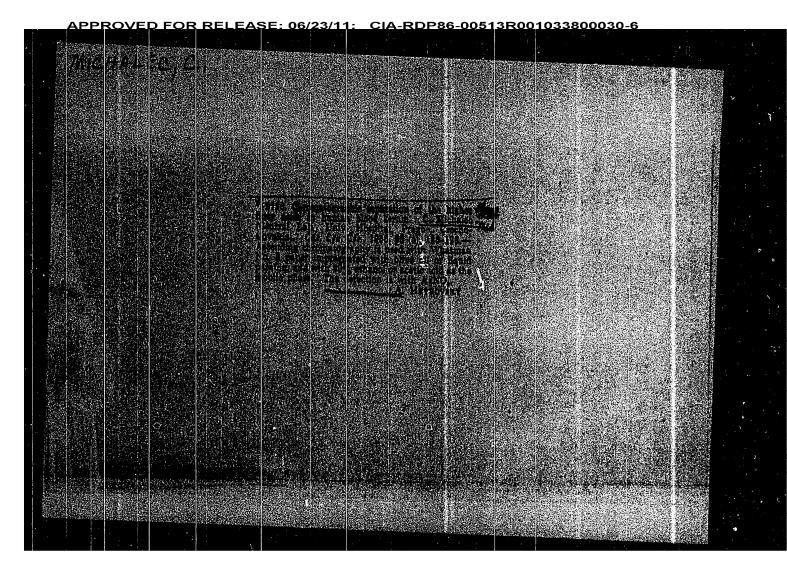


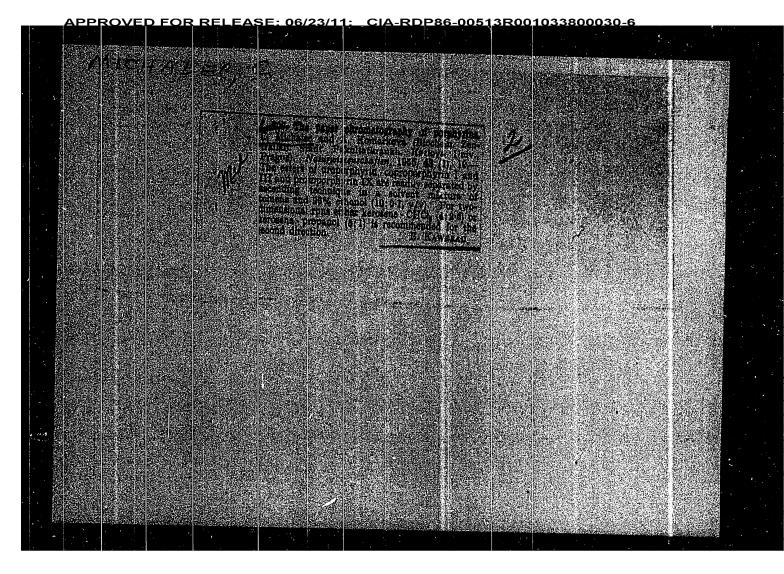
MICHALEC, C. (Praha 3, Brezinova 6)

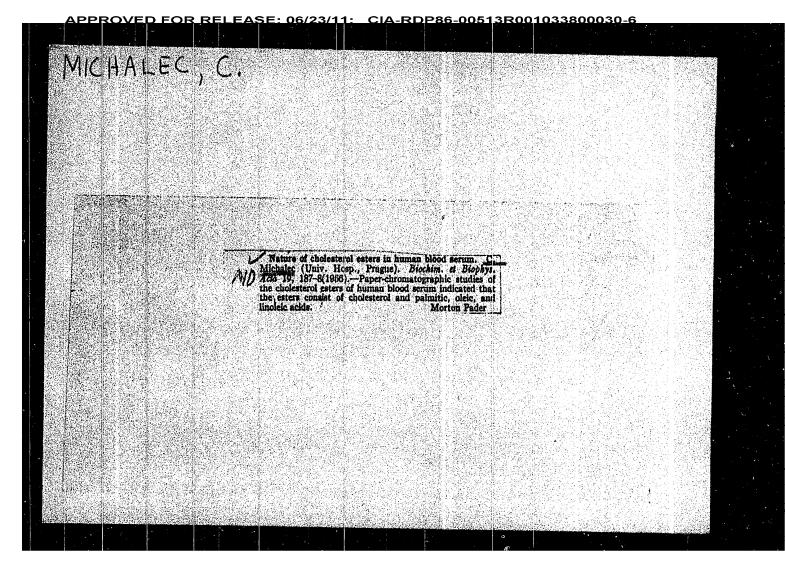
qualitative chromatographic determination of saturated & unsaturated higher fatty acids in human blood serum. Cesk. gastroenter. 11 no.5:

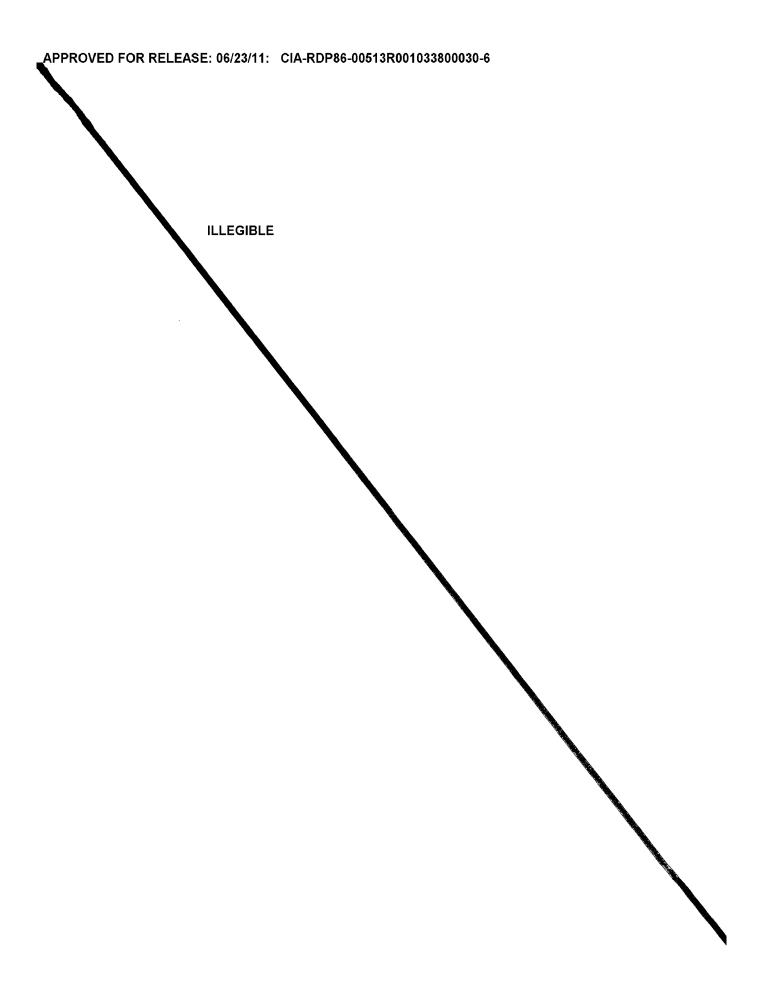
1. Ustredni biochemicke laboratore FN I v Praze, prednosta prof. Dr. J.

(FATTY ACIDS, in blood saturated & unsaturated, chromatography (Cz))

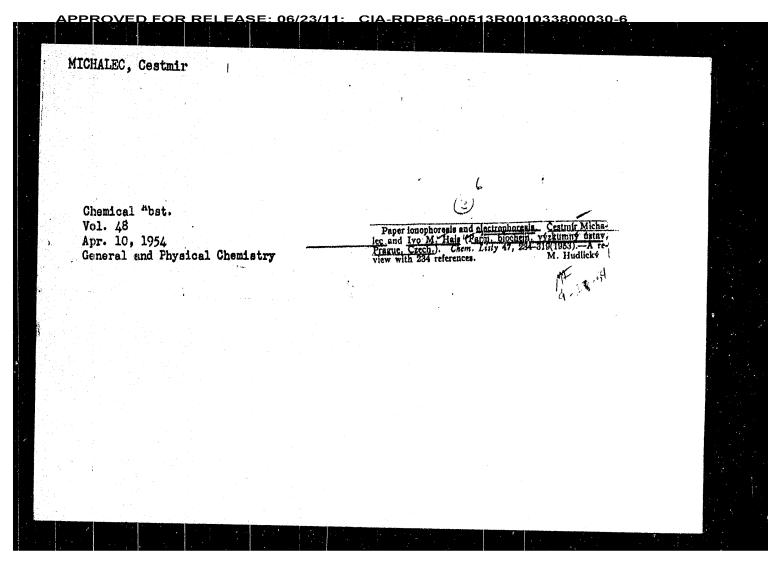








CIA-RDP86-00513R001033800030-6 MICHALEC. C. Modified method of filter paper partition electrophoresis of blood proteins. Cas. lek. cesk. 92 no.23:642-645 5 June 1953. (CLML 24:5) 1. Of the Central Biochemical Laboratory (Head--Prof. J. Horejsi, M.D.) of State Faculty Hospital.



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Lipid metabolism. I. Determination of total, free, and esterified cholesterol in blood serum in carcinomas and in liver diseases. Cas. lek. cesk. 91 no.26:767-771 27 June 52.

1. Ustr. laboratore SFN, Praha; predn. prof. dr. J. Horejsi.
(NEOPLASMS, blood in,
cholesterol, determ.)
(LIVER, diseases,
liver cholesterol in, determ.)
(CHOLESTEROL, in blood,
in cancer & liver dis., determ.)
(BLOOD,
cholesterol, in cancer & liver dis., determ.)

HOENIG, V.; BELOHRADSKY, K.; MICHALEC, C.; JANDOVA, D.

Importance of certain turbidity and flocculation tests for diagnosis of infectious hepatitis. Gas.lek.cesk. 91 no.14:432-435 4 Apr 52.

1. Z I. kliniky pro choroby vnitrni, prednosta prof. dr. M.Netousek; z odd. pro epidemicke zloutensky v Masarykovych domovech v Krci a z ustrednich biochemickych laboratori, prednosta, prof.dr. Jaroslav Horejsi.

(HEPATITIS, IMPECTIOUS, flocculation & turbidity tests, evaluation)

SLAVIK, K.; MICHALEC, C.

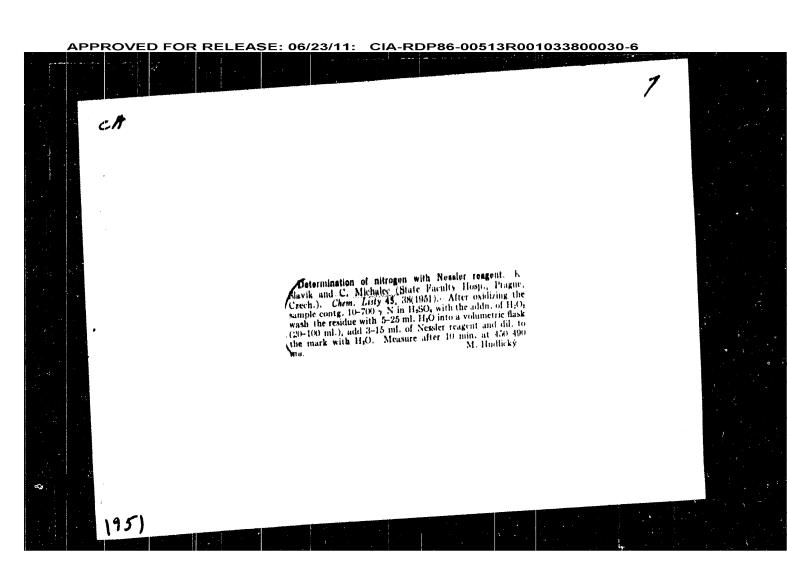
Remarks on determination of tyramine and tyrosine with Gerngross reaction. Gas.lek.cesk. 91 no.10:301-302 7 Mar 52.

1. Z Ustredni laboratore SNF, prednosta dr. J.Horejsi.
(TYRAMINE, determination,
Gerngross method)
(TYROSINE, determination,
Gerngross method)

MICHALEC, C.; SHEOVA, V.

Microdetermination of potassium in blood serum. Cas. lek. cesk. 90 no.51-52:1536-1538 28 Dec 51. (CIML 21:5)

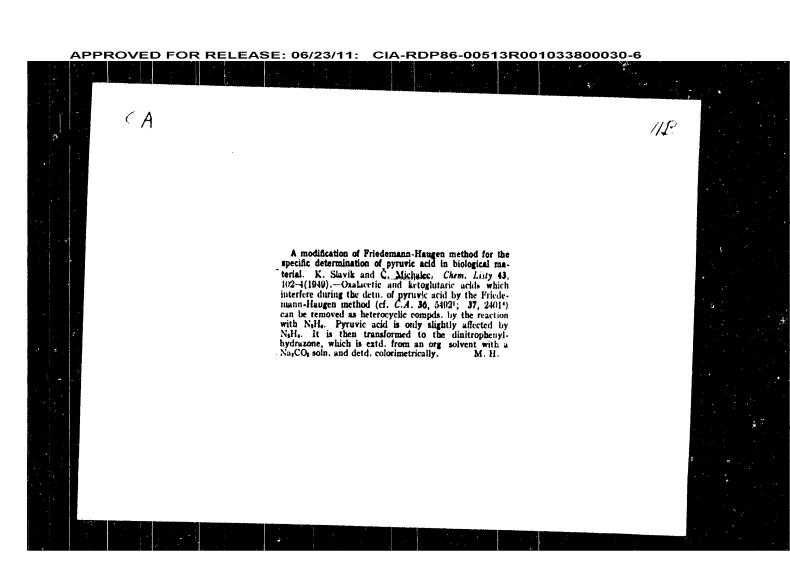
1. Of the Central Laboratory (Head--J. Horejsi, M.D.) of State Faculty Hospital, Prague.



The use of diphonylamine reaction for the determination of henceses in the presence of pentoses, guarannia said, and the clearage of segars in biological material. K. Shim clearage of segars in biological material, K. Shim clearage of segars in biological material, K. Shim clearage of segars in biological production of hences in biological material, and the clearage of segars in biological production of hences in biological production of hences in biolomaterial. Pentoses give a yellow color, glyrine, cyvine, rypisine, lypisine, tyrosine, creatine, halatidine, asparia cald, uric and, katine, cholestrol, and leerlish do not give any color reaction in concis. of curvey of 1-1.5%. Hences were detire, with an accordance of the color of the second service of the second service of the method for day.

M. Hudlický

M. Hudlický



BEKIER, Jerzy; MICHALE, Wladyslaw

Simultaneous hemilaminectomy and extrapulmonary mediastinotomy in the treatment of hour-glass tumor. Pol. tyg. lek. 18 no.34: 1275-1276 19 Ag 163.

1. Z Kliniki Neurochirurgii; kierownik: prof. dr Jerzy Szapiro 1 I Kliniki Chirurgicznej AM w Lodzi; kierownik: prof. dr Marian Stefanowski.

(PANCOAST'S SYNDROME) (SPINAL CORD NEOPLASMS)
(MEDIASTINAL NEOPLASMS) (SURGERY, OPERATIVE)

### MICHALE, Wladyslaw

Acute hemorrhagic pancreatitis of parasitic origin. Pol. przegl. chir. 35 no.4:337-339 163.

1. Z I Kliniki Chirurgicznej AM w Lodzi Kierownik: prof. dr M. Stefanowski. (PANCREATITIS) (HELMINTHIASIS) (SURGERY, OPERATIVE)

POLAND

BEKIER, Jerzy and MICHALE, Wladysław; Neurosurgical Clinic (Klinika Nourochirurgii) (Director: Prof. Dr. Jerzy Szapiro) and First Surgical Clinic (I Klinika Chirurgicana) (Director: Prof. Dr. Marian STEFANOWSKI), both of the AM [Akademia Medycana, Medical Academy] in Lodz

"Simultaneous Hemilaminectomy and Retropleural Mediastinetomy in the Treatment of Hour-clock Tumor. Case Report."

Warsaw, Polski Tygodnik Lekarski, Vol 18, No 34, 19 Aug 63, pp 1275-1276

Abstract: [Authors' English summary] Authors report case of male patient aged 36, with hour-clock neurinomma of the spinal canal and posterior mediastinum. Radical operation, involving simultaneous treatment of both areas was successful. The authors briefly review the literature and discuss the sequence of operation of the vertebral column and chest in such cases. There are 11 references: 2 Soviet, one English, the other Polish references.

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